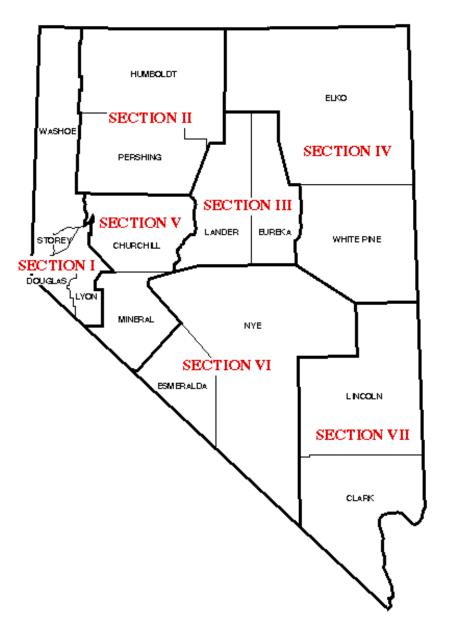
Major Mines of Nevada 1996

Mineral Industries in Nevada's Economy

The Nevada Division of Minerals



Major Mines

SECTION I Lyon County Storey County

SECTION II Humboldt County Pershing County

SECTION III Lander County Eureka County

SECTION IV Elko County White Pine County

SECTION V Churchill County Mineral County

SECTION VI Esmeralda County Nye County

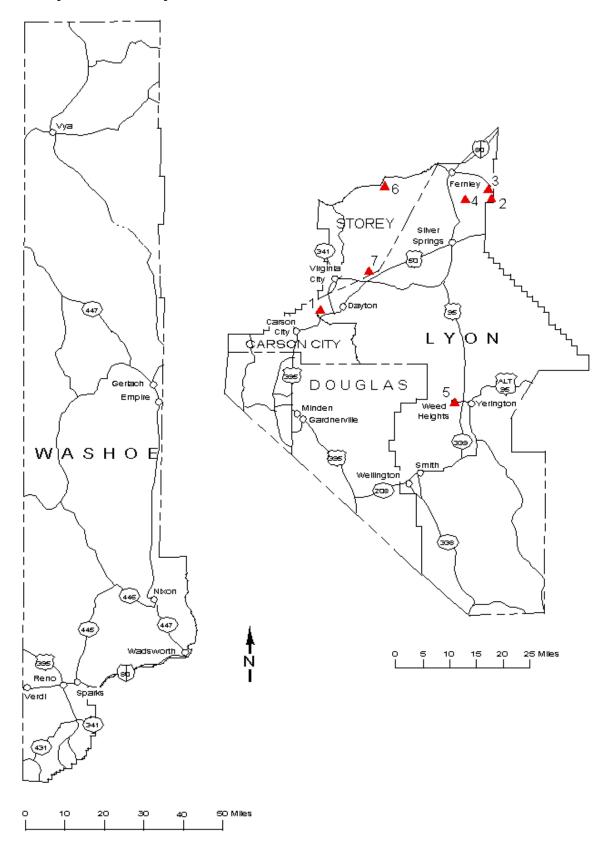
SECTION VII Clark County

Summary of 1996 Production

Economic Impacts of Mining in Nevada--1996

Major Mines, Oil Fields, and Geothermal Plants, 1996 (map)

Section I - Lyon and Storey



Section I - Lyon and Storey

Lyon County

Adams Claim Gypsum Mine (1)

Operator: Art Wilson Co. P.O. Box 1160

Carson City, NV 89702 702-882-0700 fax: 882-0790 Company employees: 7

Company employees: 7

Production: gypsum: 135,470 tons

CR Minerals Mine (2)

Operator: CR Minerals Corp. P.O. Box 858 Fernley, NV 89408

702-575-2536; fax: 575-4857 Company employees: 17 *Production:* diatomite

Hazen Pit (3)

Operator: Eagle-Picher Minerals, Inc. P.O. Box 10480 Reno, NV 89510

702-343-1818 fax: 343-1821 *Production:* diatomite

NCC Limestone Quarry (4)

Operator:

Nevada Cement Co. P.O. Box 840 Fernley, NV 89408 702-575-2281; fax: 575-4387

Company employees: 139 Production: lime/clay

Yerington and MacArthur Mines (5)

Operator:
Arimetco, Inc.
102 Burch Drive
Yerington, NV 89447
702-463-3125; fax: 463-3127
Company employees: 97

Production: copper - 15,000,000 pounds

Storey County

Clark Mine and Mill (6)

Operator:
Eagle-Picher Minerals, Inc.
P.O. Box 10480
Reno, NV 89510
702-343-1818
Company employees: 76

Company employees: 76 *Production:* diatomite

Golden Eagle Mine (7)

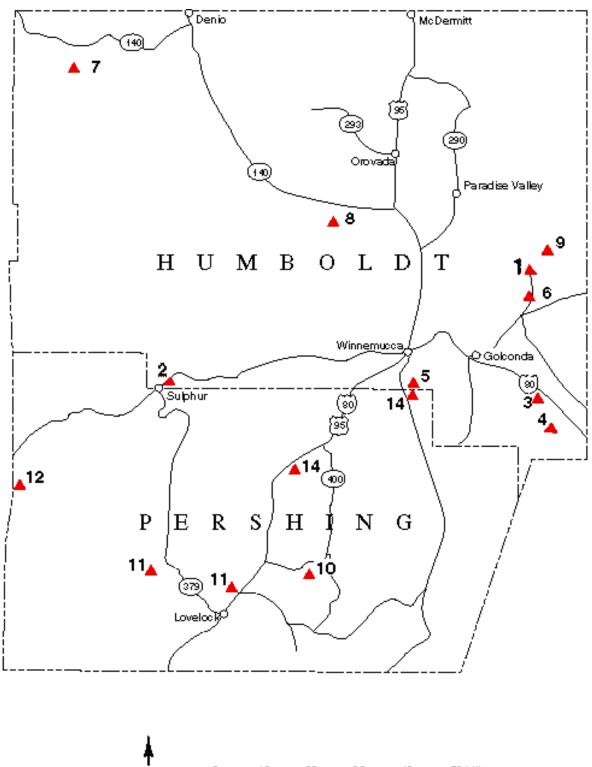
Operator:
American Eagle Resources, Inc.
P.O. Box 859
Virginia City, NV 89440
702-246-0761; fax: 246-3117
Company employees: 7

Production: gold - 2,080 oz; silver - 31,500 oz

Washoe County

No major mines were operated in Washoe County in 1996.

Section II - Humboldt and Pershing





Section II - Humboldt and Pershing

Humboldt County

Getchell Mine (1)

Operator:

Getchell Gold Corp.

P.O. Box 220

Golconda, NV 89414

702-635-5001; fax: 635-8015 Company employees: 468 Contract employees: 25 Production: gold - 171,286 oz

Hycroft Mine (2)

Operator:

Hycroft Resources & Dev., Inc.

P.O. Box 3030

Winnemucca, NV 89446 702-623-5260; fax: 625-0215 Company employees: 215

Production: gold - 89,381; silver - 321,315 oz

Lone Tree Complex (3)

Operator:

Santa Fe Pacific Gold Corp.

P.O. Box 388 Valmv. NV 89438

702-635-9000; fax: 635-0111 Company employees: 444 Production: gold - 205,738 oz

Marigold Mine (4)

Operator:

Rayrock Mines, Inc.

P.O. Box 160 Valmy, NV 89438

702-623-0818; fax: 635-2455 Company employees: 113 Production: gold - 73,500 oz

MIN-AD Mine and Mill (5)

Operator:

MIN-AD, Inc.

4210 W. Jungo Road Winnemucca, NV 89445

702-623-5944: fax: 623-9028 Company employees: 13

Production: specialty limestone - 56,000 tons

Pinson Mine (6)

Operator:

Homestake Mining Co.

P.O. Box 2280

Winnemucca, NV 89446 702-623-5036; fax: 623-5030

Company employees: 91

Production: gold - 42,431 oz; silver - 2,850 oz

Royal Peacock Opal Mine (7)

Operator:

Walter Wilson

Homestead Road P.O. 144

Orovada, NV 89425

702-941-0374

Production: precious opal

Sleeper Mine (8)

Operator:

Nevada Gold Mining inc. 600 Sod House Road Winnemucca, NV 89445 702-623-1112; fax: 623-1115 Company employees: 33

Production: gold - 38,200 oz; silver - 36,800 oz

Twin Creeks Mine (9)

Operator:

Santa Fe Pacific Gold Corp.

P.O. Box 69

Golconda, NV 89414

702-635-9400; fax: 635-4596 Company employees: 930 Contract employees: 150

Production: gold - 459,083 oz; silver - 137,914 oz

Pershing County

Coeur Rochester Mine (10)

Operator:

Coeur D'Alene Mines Corp.

P.O. Box 1057

Lovelock, NV 89419

702-273-7995; fax: 273-7423 Company employees: 288

Production: gold - 74,293 oz; silver - 6,251,180 oz

Section II - Humboldt and Pershing

Colado Mine and Plant (11)

Operator:

Eagle-Picher Minerals, Inc. 150 Coal Canyon Road Lovelock, NV 89419

702-273-2636 fax: 273-7553 Company employees: 144 Contract employees: 8 *Production:* diatomite

Empire Mine (12)

Operator:

United States Gypsum Co.

P.O. Box 130 Empire, NV 89405

702-557-2341; fax: 557-2212 Company employees: 139

Production: gypsum - 441,000 tons

Florida Canyon Mine (13)

Operator:

Florida Canyon Mining, Inc.

P.O. Box 330 Imlay, NV 89418

702-538-7300; fax: 538-7324 Company employees: 330 Contract employees: 37

Production: gold - 183,176 oz; silver - 104,684 oz

Sexton and Sons Mine and Mill (14)

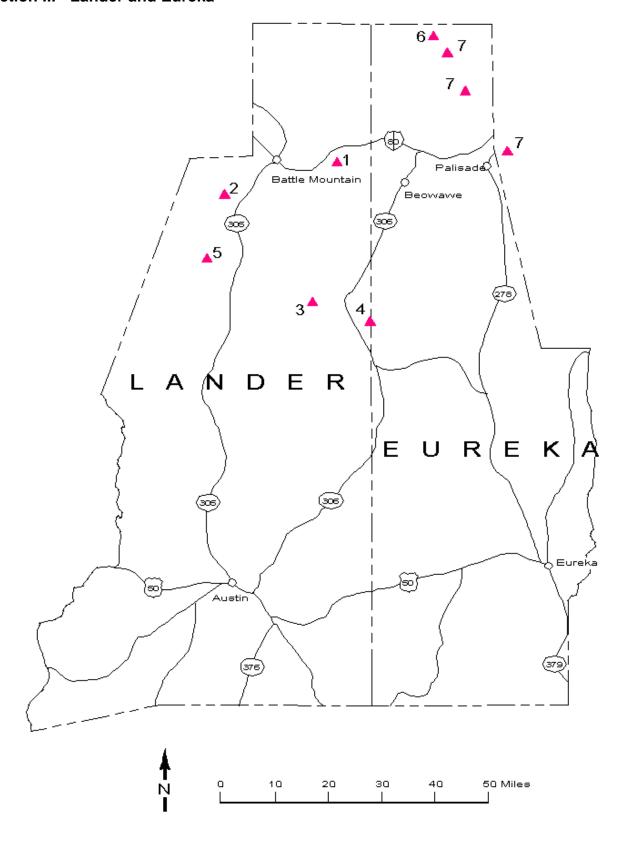
Operator:

Nutritional Additives Corp. 5184 E. Winnemucca Blvd Winnemucca, NV 89445

702-623-3328

Company employees: 6 *Production:* dolomite

Section III - Lander and Eureka



Section III - Lander and Eureka

Lander County

Argenta Mine and Mill (1)

Operator:

Baker Hughes INTEQ

P.O. Box 277

Battle Mountain, NV 89820 702-635-5441; fax: 635-5455 Company employees: 18 Shipped: barite - 131,450 tons

Battle Mountain Complex (2)

Operator:

Battle Mountain Gold Co.

P.O. Box 1627

Battle Mountain, NV 89820 702-635-2465; fax: 635-8677 Company employees: 120

Production: gold - 73,100 oz; silver - 201,460 oz

Battle Mountain Grinding Plant (Greystone Mine) (3)

Operator:

M-I Drilling Fluids Co.

P.O. Box 370

Battle Mountain, NV 89820 702-635-5135; fax: 635-2191 Company employees: 75 Shipped: barite - 358,680 tons

Cortez Gold Mines (4)

Operator:

Placer Dome U.S. Inc. HC66-50, Star Route Beowawe, NV 89821

702-468-4400; fax: 468-4496 Company employees: 417

Production: gold - 160,782 oz; silver - 6,800 oz

McCoy/Cove Mine (5)

Operator:

Echo Bay Minerals Co.

P.O. Box 1658

Battle Mountain, NV 89820 702-635-5500; fax: 635-5098 Company employees: 533

Production: gold - 271,731 oz; silver - 7,102,348

ΟZ

Eureka County

Betze-Post Mine (6)

Operator:

Barrick Goldstrike Mines, Inc.

P.O. Box 29 Elko, NV 89803

702-778-8196; fax: 738-6543 Company employees: 1,548 Contract employees: 175

Production: gold - 1,934,966 oz; silver - 73,140 oz

Newmont Gold Company (7)

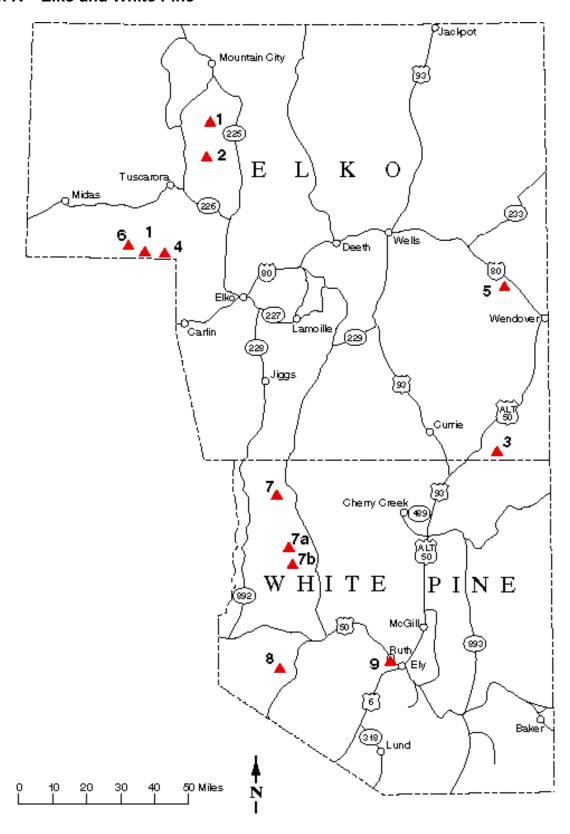
Operator:

Newmont Gold Co. P.O. Box 669 Carlin, NV 89822

702-778-4000; fax: 778-4754 Company employees: 2,271

Production: gold - 1,700,033 oz; silver - 321,995 oz

Section IV - Elko and White Pine



Section IV - Elko and White Pine

Elko County

Dee Gold Mine (1)

Operator:

Rayrock Mines, Inc. P.O. Box 160 Valmy, NN 89438

702-738-6440; fax: 635-2455 Company employees: 89

Production: gold - 45,070 oz; silver - 50,322 oz

Jerritt Canyon Mine (2)

Operator:

Independence Mining Co., Inc.

HC31 Box 78 Elko, NV 89801

702-758-9221; fax: 758-9231 Company employees: 660 *Production:* gold - 309,477 oz

Kinsley Mountain Mine (3)

Operator: Alta Gold Co. HC10, Box 10050 Ely, NV 89301

702-289-3007; fax 289-4816 Company employees: 95

Production: gold - 44,553 oz; silver - 10,930 oz

Meikle Mine (4)

Operator:

Barrick Goldstrike Mines, Inc.

P.O. Box 29 Elko, NV 89803

Company employees: 188 Contract employees: 50 *Production:* gold - 78,442 oz

Pilot Peak Lime Plant (5)

Operator:

Continental Lime Inc.

P.O. Box 2520

Wendover, NV 89883

702-478-5463; fax: 478-5149 Company employees: 53 Production: Lime Rossi Mine (6)

Operator:

Baroid Drilling Fluids

P.O. Box 340

Battle Mountain, NV 89820 702-468-0515; fax: 468-2060

Company employees: 1 Contract employees: 46

Shippped: barite - 111,080 tons

White Pine County

Bald Mountain Mine (7)

Operator:

Placer Dome U.S. Inc.

P.O. Box 2706 Elko. NV 89803

702-744-4227; fax: 744-4216 Company employees: 206

Production (includes Alligator Ridge [7a] and Yankee [7b] Projects): gold - 107,708 oz; silver -

50.660 oz

Mt Hamilton Mine (8)

Operator:

Rea Gold Corp. P.O. Box 150476

East Ely, NV 89315

702-237-5100; fax 237-5158 Company employees: 146

Production: gold - 35,000 oz; silver - 71,500 oz

Robinson Mine (9)

Operator:

BHP Copper North America.

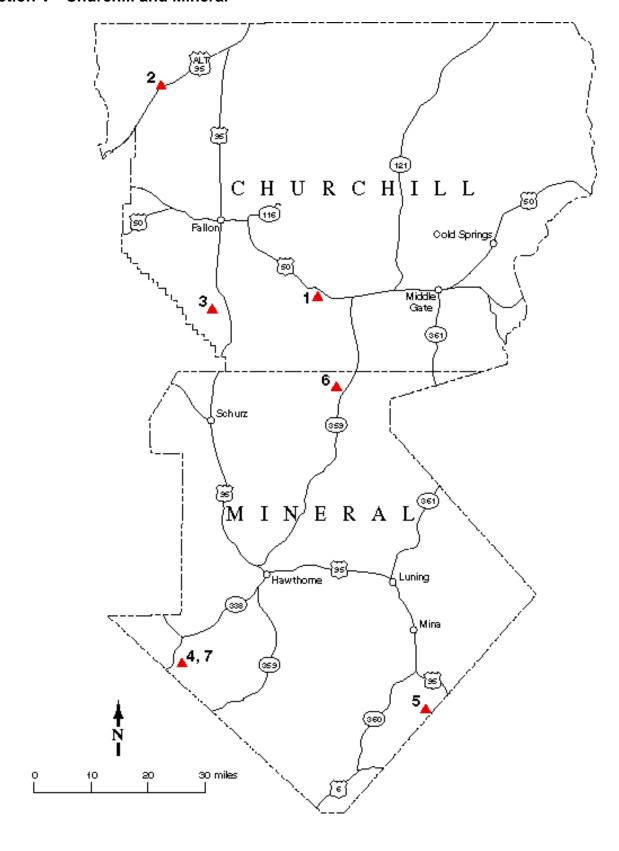
P.O. Box 382 Ruth, NV 89319

702-289-7000; fax: 289-7009 Company employees: 427

Production: Concentrate containing 84 million pounds of copper, 39,000 oz gold, and 170,000 oz

silver

Section V - Churchill and Mineral



Section V - Churchill and Mineral

Churchill County

Huck Salt (1) Operator: Huck Salt Co. 5033 Austin Hwy. Fallon, NV 89406 702-423-2055

Company employees: 4 Production: salt - 12,848 tons

Moltan Company/Fernley Nevada Plant (2)

Operator: B.J. Gurley I-80 Frontage Road Fernley, NV 89408

702-423-6668; fax: 423-6411 Company employees: 69 Production: diatomite

Popcorn Mine (3)

Operator:

Eagle-Picher Minerals, Inc.

P.O. Box 10480 Reno, NV 89510

702-343-1818 fax: 343-1821

Production: perlite

Mineral County

Aurora Mine (4)

Operator:

Nevada Goldfields P.O. Box 3070

Hawthorne, NV 89415 702-945-3368; fax: 945-3360

Company employees: 41 *Production:* gold - 10,374 oz

Candelaria Mine (5)

Operator:

Kinross Candelaria Mining Co.

P.O. Box 1240

Hawthorne, NV 89415

702-573-2471; fax: 573-2520 Company employees: 50 Contract employees: 55

Production: silver - 3,857,000 oz; gold - 15,030 oz

Denton-Rawhide Mine (6)

Operator:

Kennecott Rawhide Mining Co.

P.O. Box 2070 Fallon, NV 89407

702-945-1015; fax: 945-1213 Company employees: 184

Production: gold - 126,000 oz; silver - 1,073,000

ΟZ

The Aurora Partnership Mine (8)

Operator:

The Aurora Partnership

P.O. Box 1628

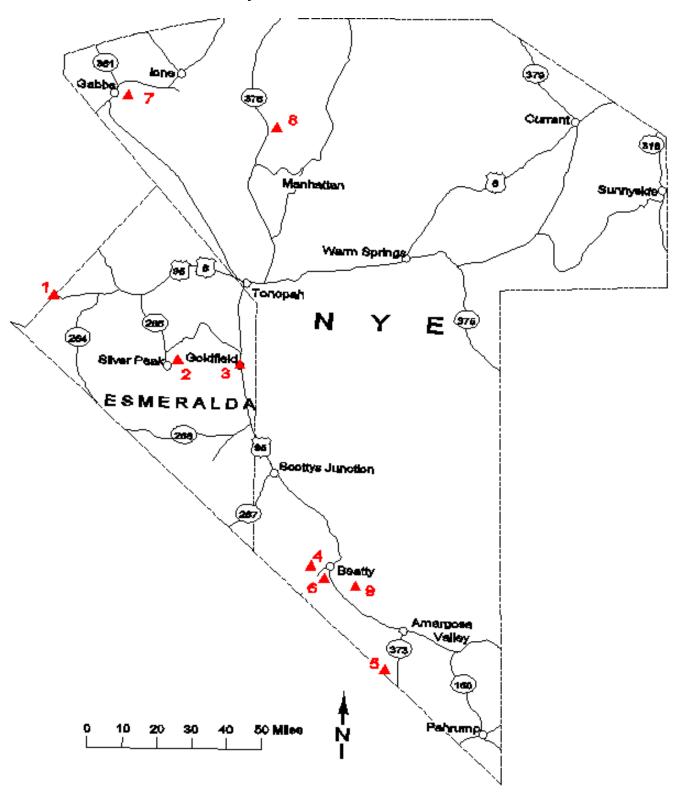
Hawthorne, NV 89415

702-945-3341; fax: 945-3162

Company employees: 18

Production: gold - 7,528 oz; silver - 15,000 oz

Section VI - Esmeralda and Nye



Section VI - Esmeralda and Nye

Esmeralda County

Basalt Mine and Mill (1)

Operator:

Grefco Minerals, Inc.

P.O. Box 288

Mina, NV 89422

Dicalite Toll Station #1

fax: 619-872-6006 Company employees: 6 *Production:* Diatomite

Goldfield Operation (3)

Operator:

American Resource Corp.

P.O. Box 160

Goldfield, NV 89013

702-485-3218; fax: 485-3268

Company employees: 15 *Production:* gold - 3,810 oz; silver - 1,349 oz

Silver Peak Operations (2)

Operator:

Cyprus Foote Mineral Co.

P.O. Box 98

Silver Peak, NV 89047

702-937-2222; fax: 937-2250 Company employees: 75 Contract employees: 8

Production: Lithium carbonate

Nye County

Bullfrog Mine (4)

Operator:

Barrick Gold Inc. P.O. Box 519

Beatty, NV 89003

702-553-2900; fax: 553-2963 Company employees: 329

Contract employees: 529

Production: gold - 205,348 oz; silver - 288,700 oz

IMV Division of Floridin (5)

Operator:

Floridin Co.

Route Box 549

Amargosa Valley, NV 89020 702-372-5341; fax: 372-5640

Company employees: 37

Production: specialty clays - 30,500 tons

New Discovery Mine and Mill (6)

Operator:

Vanderbilt Minerals Corp.

2320 Viking Road

Las Vegas, NV 89109

702-732-3174; fax 731-3621

Company employees: 5

Production: specialty clays - 3,476 tons

Premier Services Mine (7)

Operator:

Premier Services Corp.

P.O. Box 177

Gabbs, NV 89409

702-285-2601; fax: 285-4021

Company employees: 96 Production: magnesium oxide

Smoky Valley Common Operation (8)

Operator:

Round Mountain Gold Corp.

P.O. Box 480

Round Mountain, NV 89045

702-377-2366; fax: 377-3240

Company employees: 696

Production: gold - 410,977 oz; silver - 345,258 oz

Sterling Mine (9)

Operator:

Cathedral Gold US Corp.

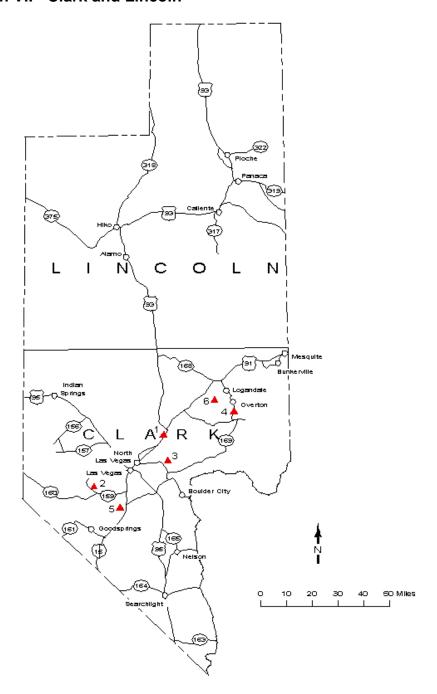
P.O. Box 549

Beatty, NV 89003

702-222-4844; fax: 372-1720 Company employees: 36

Production: gold - 14,000

Section VII - Clark and Lincoln



Section VII - Clark and Lincoln

Clark County

Apex Mine and Plant (1)

Operator:

Chemical Lime Co. P.O. Box 3609 North Las Vegas, NV 89036

702-643-7702; fax: 643-9517 Company employees: 50

Production: lime

James Hardy Gypsum (2)

Operator:

James Hardie Gypsum (NV) Inc. HCR 89033, Box 2900 Las Vegas, NV 89124 702-875-4111; fax: 875-4213 Company employees: 128

Production: gypsum - 527,462 tons

PABCO Gypsum (3)

Operator:

Pacific Coast Building Products, Inc. 1973 N. Nellis Blvd. #328 Las Vegas, NV 89115 702-643-1016; fax: 643-6249 Company employees: 80 Contract employees: 3

Production: gypsum - 565,300 tons

Simplot Silica Products (4)

Operator:

Simplot Industries P.O. Box 308 Overton, NV 89040

702-397-2667; fax: 397-2798 Company employees: 44

Production: silica sand - 655,000 tons

Sloan Mine (5)

Operator: Chemical Lime Co. HCR 27, Box 2300 Las Vegas, NV 89124 702-361-6901; fax: 361-7890

Company employees: 7

Production: dolomite

Weiser Quarry (6)

Operator: Georgia-Pacific Corp. P.O. Box 30006

North Las Vegas, NV 89036 702-643-8100; fax: 643-2049 Company employees: 47 *Production:* gypsum

Summary of 1996 Production

| Gold 7,008,000 | ounces* |
|--------------------------|---------|
| Silver 20,720,000 | ounces* |
| Barite (shipped) 601,000 | tons |
| Copper 175,000,000 | pounds |
| Diatomite** | |
| Dolomite** | |
| Gypsum 1,670,000 | tons |
| Limestone** | |
| Lithium carbonate** | |
| Magnesium oxide** | |
| Mercury ** | |
| Perlite** | |
| Precious opal 70 | pounds |
| Salt | tons |
| Silica sand 655,000 | tons |
| Specialty clay 34,000 | tons |
| | |

^{*} Includes production from smaller mines not listed in this report.

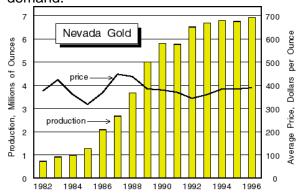
^{**} Proprietary information.

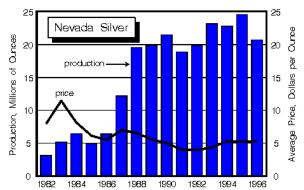
Economic Impacts of Mining in Nevada -- 1996

Mining in Nevada in 1996 grew over the prior year in terms of production amounts and value. From the discovery of the Comstock silver deposits in 1859 to today, mining has had a major role in the state's economy. The Nevada mineral industry in 1996, as it has for several years, led the nation in the production of gold, silver, and barite; second in diatomite and lithium; and was the only producer of mined magnesite. Total mineral production in Nevada in 1996 had an estimated value of about \$3.3 billion.

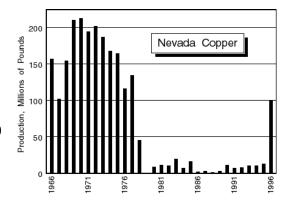
Production Highlights

Nevada gold production exceeded seven million troy ounces in 1996, the first time any state has reached that mark in a single year. Silver production exceeded 20 million ounces for the fourth year in a row. Copper production increased more than tenfold with the new operations of BHP Copper in the Ely area. Barite production was up by 28% as a result of aggressive marketing and slightly improved demand.





Perhaps the most significant trend that became firmly established in 1996 is the growing production of gold from underground operations. In 1997, it is expected that nearly 20% of the state's nation-leading gold production will be produced using underground mining methods. The largest new contributor to this statistic is Barrick Goldstrike's Meikle Mine in Elko County. Full production began in September 1996. Annual output in 1997 is expected to be about 435,000 ounces. Employment in underground mines is growing as well, with nearly 1,400 direct mining jobs now assigned to underground operations.



Employment

Over 14,400 workers were employed by Nevada mining operations in 1996. The average annual pay for these workers, the highest of any sector in the state, is about \$47,540, compared to the average salary in Nevada of about \$26,630 per year. Nevada mining's total payroll for the year is now over \$680 million. In addition to the direct employment in mining, there are an estimated 48,000 additional indirect jobs in the state related to providing goods and services needed by the industry.

Taxes and Other Impacts

The taxes paid by the mining industry to state and local government are derived from property taxes, sales and use tax and, unique to the minerals industry, net proceeds of mines tax. The total for these taxes paid by the mining industry in 1995 was about \$141 million. Total taxes paid for 1996 are not yet totaled as of this report, but they should be approximately equal to that paid for 1995.

The economic impact of mining is important for the state as a whole, but the greatest impacts are felt by local communities near the mines. Towns like Elko, Lovelock, Battle Mountain, Winnemucca, Beatty, Eureka, and Ely enjoy healthy economies because of the high paying employment and the taxes and contributions of the industry.

In addition to the positive economic impacts, growth related to mine develop ment often effects nearby communities in ways that are difficult for local governments to deal with. Strains on schools, police, and fire protection as well as other public services are felt when large mines open or undergo expansions. As a partial offset to these strains, many mining companies have provided donations of money, water systems, school buildings, buses and so on to the communities where their mines are located. For example, Homestake Mining built housing for over 100 families in Eureka and has donated thousands of dollars for scholarships and civic events.

Permitting and Reclamation

Before mining can take place, plans must be submitted and permits must be obtained from federal and state agencies that have requirements to protect water, air, wildlife, land, and other resources. Nevada and federal laws and regulations require that lands that are disturbed by mining must be rehabilitated so they can be used for other purposes once mining is complete. The goal of this process, called reclamation, is to return mined areas to a condition capable of supporting resources and activities such as wildlife habitat, livestock grazing, recreation, and new industrial uses. To ensure reclamation is done, bonds are posted by operators and held by the government regu lators. Bonds are released only after the area is stabilized and reclamation criteria are met. The various uses of the land after mining and reclamation are done also have a beneficial economic impact on nearby communities and on the state.

Gold Reserves

Nevada's reported gold reserves at or near currently operating mines which can be mined at a profit with reasonably foreseeable economics continued to grow, despite the record production. Current reserves reported at these operating mines is estimated at about 114 million ounces. Many Nevada mining operations have been able to add to reserves each year with development drilling, thereby extending their lives. It is also true that mining companies do not completely drill out their ore deposits if reserves are sufficient for their current planning horizon. There are likely extensive additional gold resources at properties that are currently in various stages of development and permitting. Major new gold mines are proposed for Eureka, Elko, Lander, Pershing, and Humboldt Counties. These properties will be contributing to Nevada production within the next one or two years.

Nevada Bureau of Mines and Geology Special Publication MI-1995, The Nevada Mineral Industry 1995, stated "At the end of the year the published gold resources in Nevada, including minable reserves and perhaps some subeconomic resources, totaled 145 million ounces of gold, enough to sustain gold production at substantial levels for 20 to 30 years, assuming stable prices."

Exploration

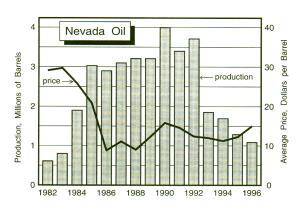
Exploration for new deposits, particularly gold, is an ongoing effort by all of the producing companies and many others who do not operate mines in the state. About 305 geologists in Nevada are employed primarily to explore for mineral properties which can be developed into new mines. These geologists with their support staff and expenditures on drilling, assaying, travel, and other related costs, represent a significant additional economic impact due to mining activity in Nevada.

Minerals Other than Gold and Silver

Minerals besides gold and silver are also important to Nevada's economy. Industrial minerals such as limestone, gypsum, barite, magnesite, and specialty clays are mined in the state. Sand and gravel and

crushed stone are critical to the building requirements of the state's cities and towns and to the infrastructure of roads and airports. Copper mining is once again becoming important to the economy of the state with opening of BHP Copper North America's major new copper operation in the Robinson district near Ely. Copper production from this operation began in February 1996 and concentrate containing 160 million pounds of copper was shipped in 1996 to Arizona for smelting.

Oil and gas exploration and production in Nevada is a small industry when compared with mining, but it does contribute to the economy of east-central Nevada. In oil field terms, Nevada is a "frontier," meaning its potential is really yet to be realized. Oil production in 1996 was about 1.1 million barrels (42 gallons per barrel) with an average value estimated at \$15.01 per barrel, or \$15.9 million. Nevada oil is used for the production of kerosene, diesel, boiler fuel, and asphalt. In 1996, 15 new wells were drilled for oil and three of these became producing wells. These wells, many of which are risky exploration wells called wildcats, indicate the oil industry's enthusiasm for Nevada's potential. No natural gas is commercially



produced in the state but minor gas is produced at the Kate Spring field in Railroad Valley and is used to fuel onsite equipment.

Nevada is rich in geothermal resources. There are currently 14 plants at 10 locations in the state with a total electric generating rated capacity of 208.6 megawatts (MW). Net geothermal electrical production sold in Nevada in 1996 was 1,358,588 MW hours with a value estimated at \$108.7 million. Electric generating capacity and output have been fairly steady for the past several years. Geothermal heat is also used in a variety of commercial, domestic, and public applications in Nevada. Mining, aquaculture, and agriculture also benefit from geothermal resources. Schools in Elko County and homes and commercial buildings in Lincoln and Washoe Counties are examples of public and private facilities in Nevada using this renewable energy resource.

Conclusion

Nevada's mineral industry continued to be a major economic force in the state during 1996. This situation should continue for many years to come. The conditions that lead to this optimism are that most Nevada mines have significant known reserves with good potential to add to those reserves. Gold exploration efforts have been successful and new large mining projects are being developed and will be on line within the next several years. Oil and gas exploration has increased, as the state has caught the eye of oil company explorationists. Finally, geothermal energy production has remained steady.

This information is from the upcoming NBMG Special Publication P-8 *Major Mines of Nevada 1996 - Mineral Industries in Nevada's Economy* compiled by the Nevada Division of Minerals.

